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08051899 BA
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Doc Code: Computer

pages of specification

and/or sequence listing

and/or table

Doc Code: Artifact

content unspecified or combined

Doc Code: Artifact

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Artifact Type Code: P

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Artifact Type Code: S

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Artifact Type Code: U

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Stapled Set(s) Color Documents or B/W Photographs

Doc Code: Artifact Artifact Type Code: C

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Microfilm(s)

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08/051,899 / 250⁰⁰

*The
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*Has received an application for a patent
for a new and useful invention. The title
and description of the invention are en-
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shall be granted under the law.*

Therefore, this

United States Patent

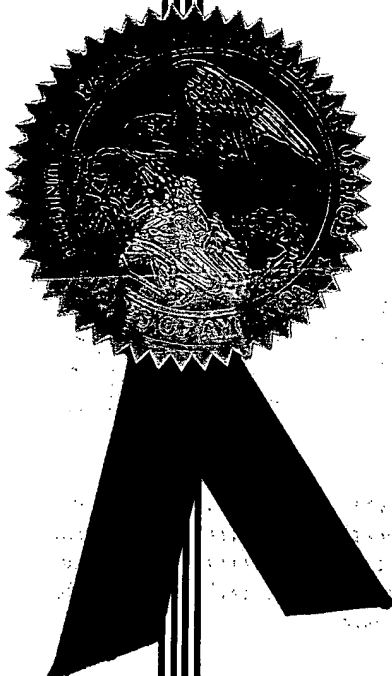
*Grants to the person or persons having
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Harry F. Mansbach, Jr.

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Attest



NOTICE

If the application for this patent was filed on or after December 12, 1980, maintenance fees are due three years and six months, seven years and six months, and eleven years and six months after the date of this grant, or within a grace period of six months thereafter upon payment of a surcharge as provided by law. The amount, number, and timing of the maintenance fees required may be changed by law or regulation.

[54] **IMPLANTABLE N-PHASIC
DEFIBRILLATOR OUTPUT BRIDGE
CIRCUIT**

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[21] Appl. No.: 501,527

[22] Filed: Mar. 28, 1990

[51] Int. Cl.⁵ A61N 1/00

[52] U.S. Cl. 128/419 D

[58] Field of Search 128/419 D, 419 PG, 419 P

[56] **References Cited**

U.S. PATENT DOCUMENTS

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Attorney, Agent, or Firm—Fleit, Jacobson, Cohn, Price,
Holman & Stern

[57] **ABSTRACT**

An output bridge circuit comprising four independently controlled transistors connected between first and second electrode terminals and a defibrillation capacitor. Two of the four transistors are driven by push-pull driver circuits and connected between the capacitor and the first and second electrode terminals. The remaining two transistors are connected between the first and second electrode terminals and ground terminals. By triggering one of the transistors connected to the push-pull driver circuits and one of the transistors connected between the electrode terminals and the ground terminal, a mono-phasic, multi-phasic, or sequential defibrillation pulse can be generated by activating the appropriate transistors.

5 Claims, 6 Drawing Sheets

